

Date: Tuesday, 10/03/2009 7:50:37 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 212/205 HIGH AFT X-TUBE ASSEMBLY
 Job Number : 46372
 Estimate Number : 10257
 P.O. Number :
 This Issue : 10/03/2009 S.O. No. :
 Prsht Rev. : NC Part Number : D212664201
 Drawing Number : D212-664-241 REV C
 Project Number : N/A
 First Issue : / / Type : CROSSTUBES Drawing Revision : C
 Material :
 Previous Run : 46371 Due Date : 23/03/2009 Qty: 1 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est Rev:E 04.02.16 Reformat K/DS
 Est Rev:F 06-03-29 Remove Comments on Pick List JLM
 Est Rev:G 07-04-30 As per Rev C JLM
 Est Rev:H 08-05-22 up date Qty of rubber cushion DD verified by:EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-201 CHG003

2.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

3.0 D212664201TRN Crosstube Turning Detail



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

CROSSTUBE TURNING DETAIL

batch B-44744

MS 09-03-10

Q

4.0 BENDING BENDING MACHINE - SKIDTUBES



Comment: BENDING MACHINE

Bend tube as per Dwg D212-664-241 using CNC bender program 212-af and Folio FT007

5.0 QC15 DIMENSIONAL CHECK OF X-TUBES



Comment: DIMENSIONAL CHECK OF X-TUBES

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DD Date: 09/03/10

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
090310	4.0	Tubes bent high	CP 09.03.10 per QSI042	Acceptable	MB 09-03-10	090310	CP 09.03.10 per QSI042	090310

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 46372

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551

2-Ream hole to finish size in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241

4-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-241

AWM / MB
09-03-10

MB 09-03-10

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1 within 24 hours of bending and drilling

AWM - 9-3-11

①

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-03-11 ①

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09-03-11 ①

10.0

OUTSIDE SERV.11

OUTSIDE SERVICE -CROSSTUBES



Comment: Sub-Contracting OUTSIDE SERVICES

Liquid Penetrant Inspection as per QSI 038

Issue P/O: 8382

LPI as per ASTM 1417 Level 2

Attach copy of NDT results to work order

C 209103/11 ①

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Inspect for transit damage Ensure copy of NDT results attached to work order.

4/3/11 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 46372

Part Number: D212664201

Job Number:



Seq. #: Machine Or Operation: Description :

12.0

QC5

INSPECT WORK TO CURRENT STEP



RT 09-03-12



Comment: DIMENSIONAL CHECK

Inspect for damage & ensure results are as per Dwg D212-664-241

13.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

RT 09-05-12

PRIME:

Start Time: 10:30

Finish Time: 11:30

PAINT:

Start Time: 2:00

Finish Time: 3:00

14.0

QC14

INSPECT SPRAY PAINT



Comment: Inspect Spray Paint

Then, Wrap in plastic bag to protect from scratches

509/03/12

15.0

D29401

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part number Description Batch

2 D2940-1

Support 41870

RT 09-03-18

16.0

D3595063530

RUBBER CUSHION



Comment: Qty.: 40000 Each(s)/Unit Total: 40000 Each(s)

Rubber Cushion

Batch: 40780

RT 09-03-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 46372

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

MS2192028

Clamp(per MIL-DTL-8783C)



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part number Description Batch

4 MS21920-28 Clamp 109182

PTO →

ET 09-03-18

18.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wipe

2-Install supports with magnobond as per QSI 015 Adhere for for 12 Hrs

A/R 6398 Magnobond Batch: 109900

Expiry Date: 09-09-19

ET 09-03-18

3-Install clamps as per Dwg D212-664-241. Torque clamps to 80-100 in lb.

ET 09-03-19

19.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/03/18

20.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

21.0

D34281

Placard



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Placard

Batch: 45182

SS 09/03/19 (X)

22.0

AN640A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt


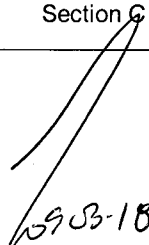
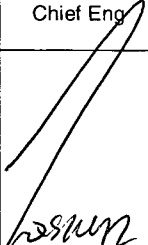
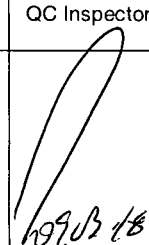
Batch: M16267

SS 09/03/10 (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: AD Date: 09/03/19

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09-03-19	18.0	clamp would to NOT achieve specified torque defective clamp R.C. clamp / defective		scrap + replace MS 21920-28 <u>B109182</u>	ET 09-03-19			

NOTE: Date & initial all entries

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Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 46372

Part Number: D212664201

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

AN641A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch:

M109371

SS 09/03/19 (A)

24.0

AN960JD616

Washer



Comment: Qty.: 18.0000 Each(s)/Unit Total: 18.0000 Each(s)

Washer

Batch:

M110002

SS 09/03/19 (A)

25.0

MS21042L6

Nut



Comment: Qty.: 6.0000 Each(s)/Unit Total: 6.0000 Each(s)

Nut

Batch:

M108183

SS 09/03/19 (A)

26.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

0903-19 (1)

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Identify and pack for shipping as per PPP D212-664-201

See A

Loc 103

9/3/19

(A) 80

28.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(1) 09/03/20

Job Completion



U 09-03 20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>J</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D212-664-241	REV. C SHEET 1 OF 3
DATE 07.03.08		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) NTS	
A	00.12.12	NEW ISSUE	
B	05.02.04	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	
C	07.03.08	REMOVE -1009 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS	

RELEASED
07.04.24
PER E.C.N. 2859

Qty	Part Number	Description
X	D212-664-241	CROSSTUBE ASSEMBLY (205/212 HIGH AFT)
1	D6006-129	CROSSTUBE
2	D2940-1	SUPPORT
4	D3595-063-530	RUBBER CUSHION
4	MS21920-28	CLAMP (OR MS21920-30)
A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) MATERIAL: MANUFACTURED FROM D6006-129
FINISHED LENGTH = 124.36±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 5 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2940-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 10) INSTALL MS21920-28 CLAMPS WITH D3595-063-530 RUBBER CUSHIONS TO SECURE D2940-1 SUPPORT ON TOP SIDE OF CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT
NOTE: MS21920-30 CLAMPS CAN BE USED TO ACCOMMODATE VARYING DIAMETERS. ENSURE THERE IS A MINIMUM OF 1.5 THREADS IN SAFETY ON THE NUTS.
- 11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

WLO 46372

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

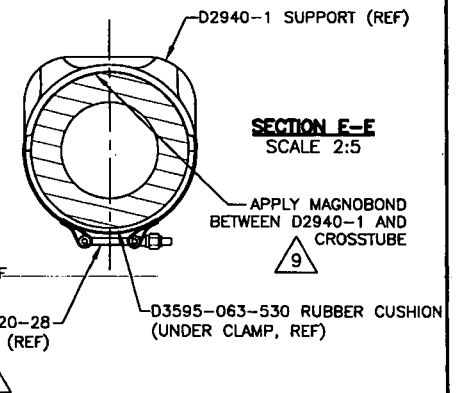
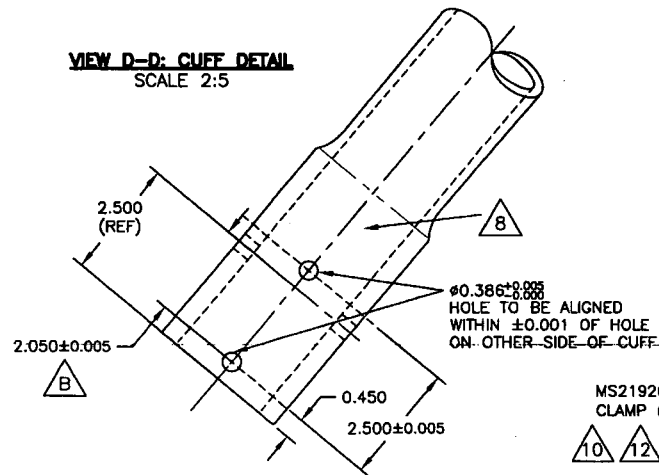
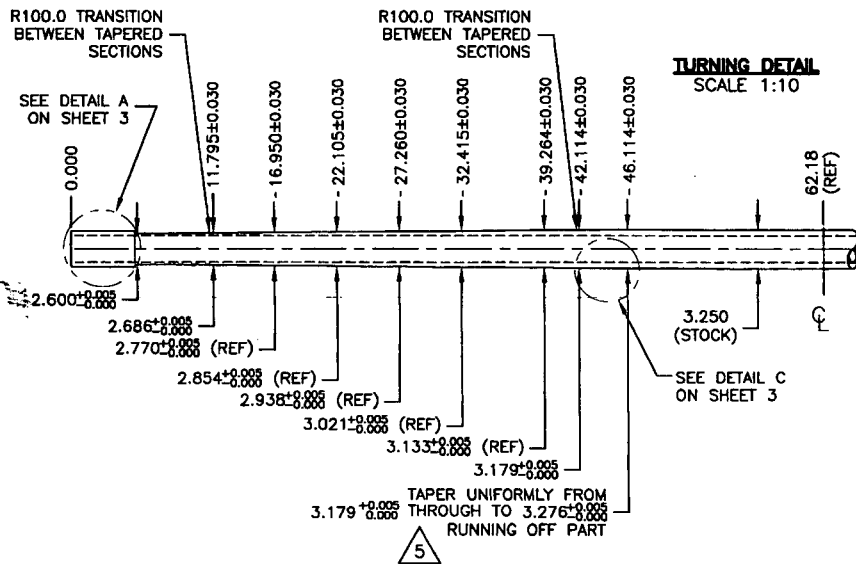
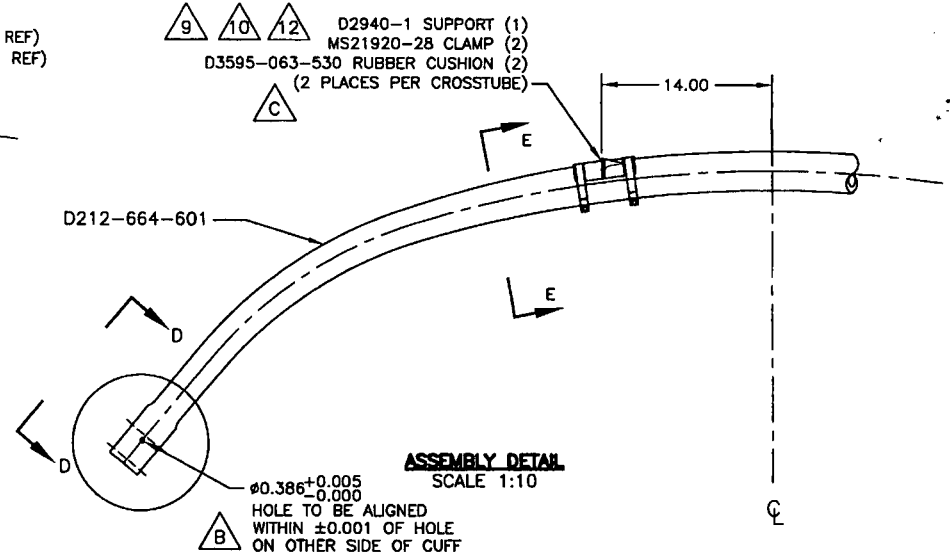
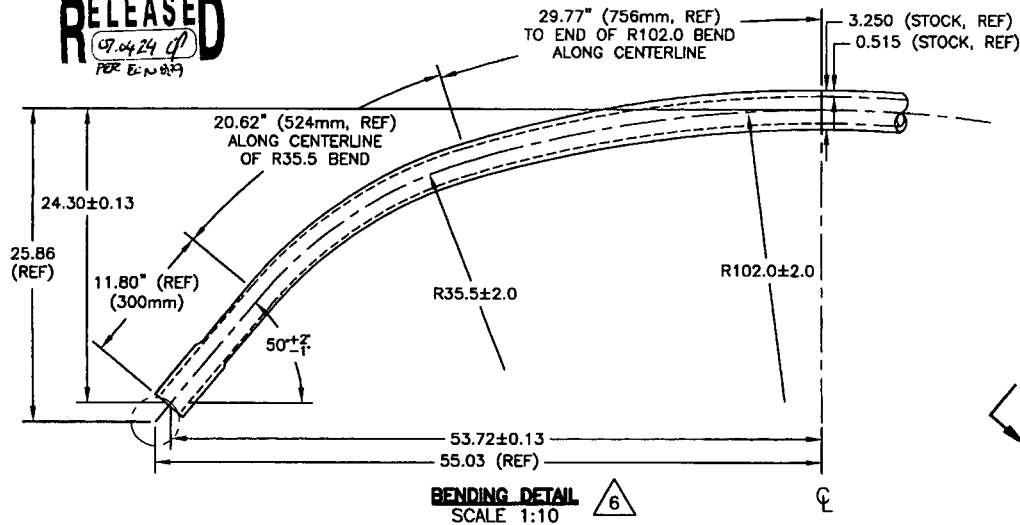
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

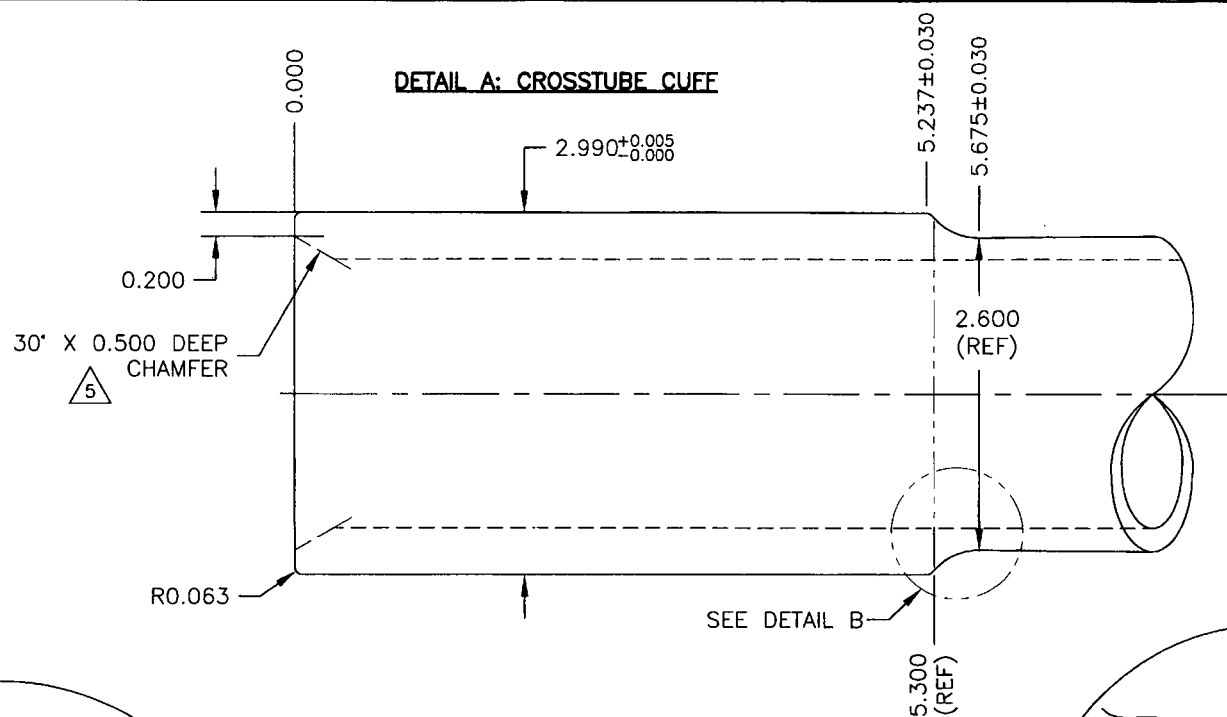
RELEASED
 07.04.24
 PER E.L.N. 07.24



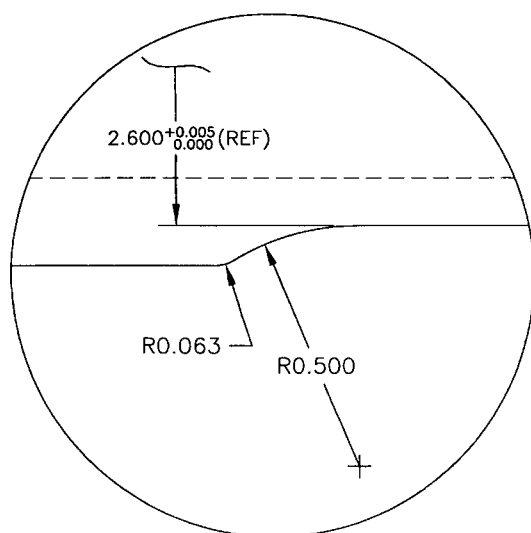
COPYRIGHT © 2000 BY DART AEROSPACE LTD.		DESIGN PH	DRAWN BY PH	DART	DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED J	APPROVED 			DRAWING NO. D212-664-241
DATE 07.03.08		TITLE CROSSTUBE ASS'Y (205/212 HI AFT)		SCALE 1:10		

RELEASED
07.04.24
PER ECN 889

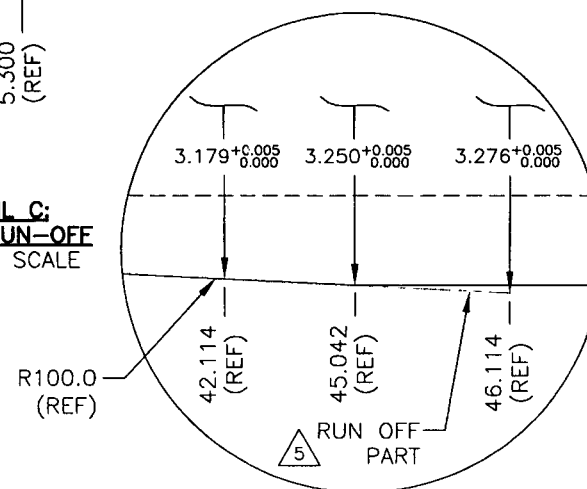
DETAIL A: CROSSTUBE CUFF



DETAIL B: CUFF TRANSITION
SCALE 4:1



DETAIL C: TAPER RUN-OFF
NOT TO SCALE



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DESIGN

DRAWN BY

DART

DART AEROSPACE LTD.
HAWKESBURY, ONTARIO, CANADA

CHECKED

APPROVED

DRAWING NO.
D212-664-241

REV. C
SHEET 3 OF 3

DATE

TITLE

SCALE

07.03.08

CROSSTUBE ASS'Y (205/212 HI AFT) 1:1

DART AEROSPACE LTD		Work Order: 46372
Description: Crosstube Assembly (205/212 High Aft)		Part Number: D212-664-241
Inspection Dwg: D212-664-241 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**
☐ **Prototype**

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	0.200	+/-0.010					
	R0.063	+/-0.010					
	2.990	+0.005/-0.000					
	5.237	+/-0.030					
	2.600	+0.005/-0.000					
	2.686	+0.005/-0.000					
	2.770	+0.005/-0.000					
	2.854	+0.005/-0.000					
	2.938	+0.005/-0.000					
	3.021	+0.005/-0.000					
	3.133	+0.005/-0.000					
	3.179	+0.005/-0.000					
SIDE B	0.200	+/-0.010					
	R0.063	+/-0.010					
	2.990	+0.005/-0.000					
	5.237	+/-0.030					
	2.600	+0.005/-0.000					
	2.686	+0.005/-0.000					
	2.770	+0.005/-0.000					
	2.854	+0.005/-0.000					
	2.938	+0.005/-0.000					
	3.021	+0.005/-0.000					
	3.133	+0.005/-0.000					
	3.179	+0.005/-0.000					
	124.36	+/-0.020					

Measured by:		Audited by:		Prototype Approval:	N/A
Date:		Date:		Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.27	New Issue (P/O D412-664-201)	KJJ/JLM	
B	06.03.09	Tolerance for 5.237 was +/-0.001	KJJ/JLM	
C	07.05.08	Dwg Rev. updated	KJJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

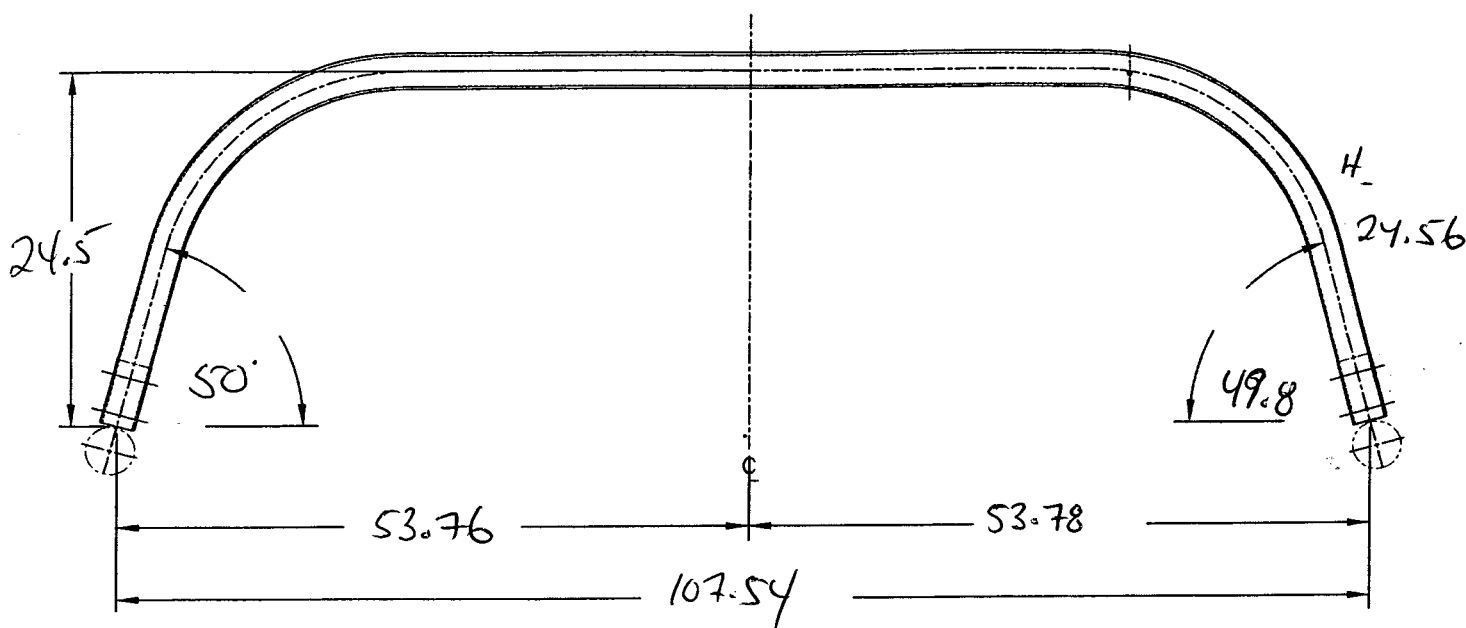
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	46372
Description: Crosstube High Aft (205/212)		Part Number:	D212-664-201
Inspection Dwg: D212-664-241 Rev: C		Page 1 of 1	

Required Dimension	Min	Max
Height	24.17	24.43
1/2 Span	53.59	53.85
Angle	49	52
Total Span	107.18	107.70



Comments
Tubes are bent high. Acceptable 07-03-10

QC15 Inspection	
Date	07-03-10

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	07.05.08	Dimensions updated per Dwg rev. C	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



LIQUID PENETRANT TEST REPORT

P- 14935

PAGE 1 OF 1

CLIENT DART AEROSPACE DATE MAR 11-2007 TIME AM ☒ PM ☐
ATTENTION LINDA / CHANTEL ACUREN JOB NO. 188-09-00343
ADDRESS 1270 ABDELDEEN ST PO/WO No. 8302
HAWKESBURY, ON WORK LOCATION HAWKESBURY 514P
KOA 1K7 ACCEPTANCE STD. ASTM 1417 REV./DATE 2007
PROJECT F.P.I. ON 100% EXTERNAL
ITEM(S) EXAMINED FIVE CROSS TUBES -
39 MACHINED PARTS - MOTOR MOUNTING

JOB DESCRIPTION _____ PROCEDURE No. LT-XXXX REV./DATE _____ TECHNIQUE No. LT-XXXX-XXX REV./DATE _____
PART No. _____ MATERIAL _____ THICKNESS _____
SCOPE WET FLUORESCENT LIQUID PENETRANT INSPECTION
ON 39 STAINLESS STEEL PARTS, 5 ALUMINE ALUMINUM X-TUBES

TEST DETAILS

METHOD <input checked="" type="checkbox"/> FLUORESCENT <input type="checkbox"/> VISIBLE	<input checked="" type="checkbox"/> WATER WASH <input type="checkbox"/> SOLVENT REMOVABLE <input type="checkbox"/> POST EMULSIFIED
FAMILY BRAND <u>MAGNA FLUX</u>	BLACK LIGHT S/N <u>1P65</u> <input type="checkbox"/> OUTPUT > 1000 μ W/cm ² <input type="checkbox"/> AMBIENT < 2 fc
PENETRANT <u>2LC7</u> MINIMUM DWELL TIME <u>45</u> MIN.	LIGHTING EQUIP. <input type="checkbox"/> FLASHLIGHT <input type="checkbox"/> TROUBLELIGHT <input type="checkbox"/> OUTPUT > 100 fc @ SURFACE
PENETRANT REMOVER <u>H2O</u> MINIMUM DRY TIME <u>>10</u> MIN.	OTHER <u>LABINO</u>
DEVELOPER <u>SKD 52</u> MINIMUM DWELL TIME <u>10</u> MIN.	LIGHT METER S/N _____ CAL DUE DATE <u>FEB 2008</u>
DEVELOPER TYPE <input checked="" type="checkbox"/> NON AQUEOUS <input type="checkbox"/> AQUEOUS <input type="checkbox"/> DRY	

TEST SURFACE

SURFACE CONDITION <input type="checkbox"/> AS GROUND <input type="checkbox"/> AS WELDED <input type="checkbox"/> MACHINED <input type="checkbox"/> SHOT BLASTED <input type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE <input type="checkbox"/> < -4°C/ 20°F <input type="checkbox"/> -4°C/ 20°F TO 10°C/50°F <input type="checkbox"/> 10°C/50°F TO 52°C/125°F <input type="checkbox"/> > 52°C/125°F

RESULTS- (☐ METRIC ☐ IMPERIAL)

Q	JOS #	45671	ACCEPT	REJECT
10	#	45670		
19	#	46051		
11	#	46054		
1	JOS #	46094		
1	#	46092		
1	#	46093		
1	#	46371		
1	#	46372		

ALL ITEMS WERE FOUND ACCEPTABLE

Scope of Services
The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care
In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE <u>Ian Titley</u> PRINT	<u>Ian Titley</u> SIGNATURE	DTR # <u>E-19816</u>
TECHNICIAN (SIGNATURE): <u>Mike Littlejohn</u>		REPORT REVIEWED BY:
NAME (PRINT): <u>Mike Littlejohn</u>	1 ST TECHNICIAN	NAME INITIALS
CGSB LEVEL <u>II</u> SNT LEVEL _____	2 ND TECHNICIAN	
CGSB REG. No. _____	CGSB LEVEL _____ SNT LEVEL _____	
	CGSB REG. No. _____	

Date: Tuesday, 10/03/2009 7:50:37 AM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 212/205 HIGH AFT X-TUBE ASSEMBLY
 Job Number : 46372
 Estimate Number : 10257
 P.O. Number :
 This Issue : 10/03/2009 S.O. No. :
 Prsht Rev. : NC
 First Issue : / / Type : CROSSTUBES
 Previous Run : 46371
 Written By :
 Checked & Approved By :
 Comment : Est Rev:E 04.02.16 Reformat K/DS
 Est Rev:F 06-03-29 Remove Coments on Pick List JLM
 Est Rev:G 07-04-30 As per Rev C JLM
 Est Rev:H 08-05-22 up date Qty of rubber cushion DD verified by:EC

Part Number : D212664201
 Drawing Number : D212-664-241 REV C
 Project Number : N/A
 Drawing Revision : C
 Material :
 Due Date : 23/03/2009 Qty: 1 Um: Each

REFERENCE ONLY

REFERENCE ONLY

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



JW 09.03.19



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D212-664-201 CHG003

2.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

3.0 D212664201TRN Crosstube Turning Detail



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

CROSSTUBE TURNING DETAIL

batch _____

4.0 BENDING BENDING MACHINE - SKIDTUBES



Comment: BENDING MACHINE

Bend tube as per Dwg D212-664-241 using CNC bender program 212-af and Folio FT007

5.0 QC15 DIMENSIONAL CHECK OF X-TUBES



Comment: DIMENSIONAL CHECK OF X-TUBES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries